

What is claimed is:

1. A device for suspension of a sample body which rotates in space about a rotation axis which is in a fixed position or is related to a fixed position, as a function of the intensity of a measurement effect,

wherein

the suspension device, which comprises at least two springs, for the sample body is designed to be planar in a rest position.

2. The device of claim 1,

wherein

the springs are composed of metal.

3. The device of claim 1,

wherein

the springs are composed of silicon.

4. The device of claim 1,

wherein

the springs are composed of glass.

5. The device of claim 1,

wherein

the sample body and springs are composed of the same material.

6. The device of claim 1,

wherein

the sample body and springs are integrally connected to one another.

7. The device of claim 1,

wherein

at least two springs are provided, with one of the springs being arranged above the sample body, and one being arranged underneath the sample body.

8. The device of claim 1,

wherein

at least two springs are provided, with one of the springs being arranged above the sample body, and one being arranged underneath the sample body, the spring

force axes of the two springs run on a line.

9. The device of claim 1,
wherein

four springs are provided, with two of the springs being arranged above the sample body and two further springs being arranged underneath the sample body, such that the spring axes of two opposite springs in each case run on a line, and the two lines which are produced by four springs are approximately at right angles to one another.

10. The device of claim 1
wherein

the device is a paramagnetic oxygen measurement device, and the sample body is dumbbell-shaped.

11. The device of claim 1,
wherein

the springs are suspended such that their main spring axis is at right angles to the line of force of the suspension.

12. The device of claim 1,
wherein

the springs are suspended in a suspension frame which is arranged around the sample body.

13. The device of claim 1,
wherein

the springs are at the same time used to provide electrical supply leads to the sample body.

14. The device of claim 1,
wherein

the springs or the spring packs are cut from a thin metal sheet.

15. The device of claim 1,
wherein

the springs or the spring packs are manufactured by means of an etching technique from a thin metal sheet.